

**In the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application. The claim amendments contained in this Supplemental Response replace the claim amendments contained in the Response mailed herein on February 3, 2004, which the Examiner indicates was non-responsive to the Office Action.

Upon entry of the present amendment, the claims will stand as follows:

Please cancel claims 1-33, 37 and 41-57 without prejudice.

Please add new claim 58.

Please amend claims 34 and 40 as follows:

Claims 1-33 (Cancelled).

34. (Currently Amended) A method for identifying an agent that ~~modulates~~ decreases the ~~expression or~~ activity of BACE1, ~~said method~~ comprising:

administering an agent to be tested to a transgenic mouse that ~~is transgenic for overexpression of~~ overexpresses A $\beta$ 1-42; and

comparing the BACE1 ~~expression or~~ activity of the transgenic mouse contacted with the agent with that of a BACE1-knockout mouse not contacted with the agent, whereby ~~production of the level of~~ A $\beta$ 1-42 in the transgenic mouse ~~substantially equal~~ similar to that of the BACE1-knockout mouse is indicative of an agent that decreases BACE1 ~~expression or~~ activity.

Claims 35-39 (Cancelled).

40. (Currently Amended) The method of claim 34, wherein the decrease in BACE1 ~~expression or~~ activity indicates the agent is a suitable candidate for use in treatment of diseases associated with  $\beta$ -amyloid production in humans.

In re Application of:  
Wong et al.  
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Claims 41-57 (Cancelled).

58. (New) The method of claim 34, wherein the agent is selected from a peptide, peptidomimetic, antibody, or small organic molecule.